

Focus on: Reading Your Water Meter

Meters on the market have different designs, units of measure, or multipliers. This guide explains how to read meters and some common features.

Sweep hands vs. flow rate indicators

Not all meters have a flow rate indicator. Some meters only display the volume of water, while others display both flow rate and volume.

Sweep hands

A meter may have a sweep hand that acts similar to the minute hand of a clock. In the example below, one full revolution of the sweep hand indicates 100 gallons have passed through the meter. As shown in Figure 1, the meter only shows the volume of water used.

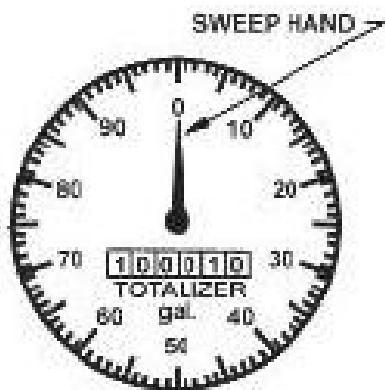


Figure 1. Meter face with sweep hand and totalizer.

For meters with a sweep hand, sometimes the last number(s) of the odometer are non-rotating or printed on the dial face. The meter shown in Figure 2 has a blue zero to the right of the totalizer to represent a fixed number. This meter also has a 10 gallon sweep, so that one rotation of the hand represents 10 gallons. Since the black "1" on the totalizer has not yet fully turned over, the sweep hand is read in its place. The meter reading is 8.3 gallons.



Figure 2. Meter face with a fixed totalizer number and a sweep hand.

Flow rate indicators

A meter may also have a flow rate indicator hand that works like a speedometer in a car. In Figure 3 for example, water flow is at 20 gallons per minute (gpm).

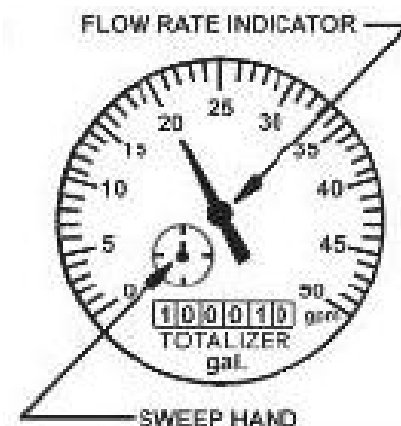


Figure 3. Meter face with flow rate indicator, sweep hand, and totalizer.

The totalizer displays the volume in gallons. The Figure 3 meter face also has a small sweep hand, which works as shown in Figure 1.

Totalizers

Totalizers are much like the odometer in a car. As water passes through the meter, the numbers will spin on a mechanical or digital counter.



Figure 4. This meter has a flow rate indicator, reading in gallons per minute. The totalizer reads in acre-feet x 0.001. The reading on the meter is 679,675 acre-feet x 0.001, or 679.675 acre-feet.

Below are examples of totalizer readings and rollover values.

Example 1.

1	2	3	4	5	6
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U.S. Gallons x 100

Reading: 12,345,600 gallons

Maximum reading: 99,999,900 gallons

Rollover value: 100,000,000 gallons

Example 2.

1	2	3	4	5	6
---	---	---	---	---	---

X 10 Cubic Feet

Reading: 1,234,560 cubic feet

Maximum reading: 9,999,990 cubic feet

Rollover value: 10,000,000 cubic feet

Example 3.

1	2	3	4	5	6	0	0
---	---	---	---	---	---	---	---

U.S. gallons

Reading: 12,345,600 Gallons

Maximum reading: 99,999,900 gallons

Rollover value: 100,000,000 gallons

Example 4.

1	2	3	4	5	6
---	---	---	---	---	---

Acre-Feet

Reading: 123,456 acre-feet

Rollover: 1,000,000 acre-feet

Example 5.

1	2	3	4	5	6
---	---	---	---	---	---

Cubic Feet

Reading: 123,456 cubic feet

Rollover value: 1,000,000 cubic feet

Example 6.

1	2	3	4	5	6
---	---	---	---	---	---

Acre-Feet x .01

Reading: 1,234.56 acre-feet

Maximum reading: 999,999 acre-feet

Rollover value: 10,000.00 acre-feet

Example 7.

1	2	3	4	5	6
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.001 Acre-Feet

Reading: 1,234.56 acre-feet

Maximum reading: 9,999.990 acre feet

Rollover value: 10,000.000 acre-feet

More information

If you have questions on our metering program or how to read your meter, visit our metering website.

- [Requirements for metering water use](https://ecology.wa.gov/water-shorelines/water-supply/water-rights/metering-water-use)¹
- [Recording and reporting water use](https://ecology.wa.gov/regulations-permits/reporting-requirements/water-metering-reporting)²
- [Metering technical information](https://ecology.wa.gov/regulations-permits/guidance-technical-assistance/metering)³

You may also call or email the office serving the area where your water source is located. Your regional metering coordinator may ask you to provide information about your meter, including a picture of the meter face.

Office of Columbia River:

All water sources within two miles of the Columbia River.

509-575-2597

wrocrprojects@ecy.wa.gov

Region offices

Central region:

Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, and Yakima counties.

509-575-2597 or wrcro@ecy.wa.gov

Eastern region:

Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman counties.

509-329-3400 or wrero@ecy.wa.gov

Northwest region:

Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom counties.

206-594-0193 or wrnwro@ecy.wa.gov

Southwest region:

Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, ADA Accessibility

360-407-6300 or wrswro@ecy.wa.gov

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¹ <https://ecology.wa.gov/water-shorelines/water-supply/water-rights/metering-water-use>

² <https://ecology.wa.gov/regulations-permits/reporting-requirements/water-metering-reporting>

³ <https://ecology.wa.gov/regulations-permits/guidance-technical-assistance/metering>